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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,447	09/01/1999	Sachdev S. Sidhu	11669.141USWO ✓	2633

  

EXAMINER	
STEELE, AMBER D	

  

ART UNIT	PAPER NUMBER
1639	

  

MAIL DATE	DELIVERY MODE
08/30/2007	PAPER

23552 7590 08/30/2007  
MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

\*BRD  
KMK

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Seq Resp 1: 09/30/2007  
Seq Resp 3/PTA: 11/30/2007  
Seq Resp start: 02/29/2008  
dv

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09380447	9/1/1999	SIDHU ET AL.	11669.141USWO

MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

**EXAMINER**

Amber D.. Steele

**ART UNIT****PAPER**

1639

20070821

**DATE MAILED:**

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

1)The present application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821 (a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825. The sequence listing has various errors as indicated in the attached Raw Sequence Listing and error report.

2)Applicant is given ONE MONTH from the date of this letter within which to comply with the Sequence Rules, 37 CFR 1.821-1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136. In NO case may an applicant extend the period for response beyond the six month statutory period. Applicant is requested to return a copy of the attached Notice to Comply with the response.

3)Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amber D. Steele whose telephone number is 571-272-5538. The examiner can normally be reached Monday through Friday 9:00AM-5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Schultz can be reached at 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ADS  
August 21, 2007

**MARK L. SHIBUYA**  
**PRIMARY EXAMINER**

<b>Notice to Comply</b>	<b>Application No.</b> 09/380,447	<b>Applicant(s)</b> S IDHU ET AL.	
	<b>Examiner</b> Steele, A. D.	<b>Art Unit</b> 1639	

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set in the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☒ 7. Other: see attached PTO-90C.

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.**
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (571) 272-2510

For CRF Submission Help, call (571) 272-2501/2583.

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**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY**

=====

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Mon Jul 30 14:06:26 EDT 2007

=====

\*\*\*\*\*

Reviewer Comments:

<150> US 60/134,870

<151> 1999 05 19

<150> US 60/133,296

<151> 1999 05 10

<150> US 60/103,514

<151> 1998 10 08

<150> US 60/094,291

<151> 1998 07 27

<150> PCT/USUS99/16596

<151> 1999 07 22

The above non-ASCII characters ("squares") between dates appear  
throughout the submitted sequence listing file; they also appear in  
<222> responses which indicate locations within the sequence. Please  
replace them with hyphens.

<400> 293

His His His His

1

69

Please remove the above "69" appearing at the end of the submitted file.

Application No: 09380447

Version No: 3.0

Input Set:

Output Set:

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 Finished: 2007-07-19 18:31:26.799  
 Elapsed: 0 hr(s) 1 min(s) 32 sec(s) 748 ms  
 Total Warnings: 284  
 Total Errors: 366  
 No. of SeqIDs Defined: 292  
 Actual SeqID Count: 293

Error code	Error Description
E 287	Invalid WIPO ST.2 date format; Use (YYYY-MM-DD) in <141>
E 287	Invalid WIPO ST.2 date format; Use (YYYY-MM-DD) in <151>
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E 287	Invalid WIPO ST.2 date format; Use (YYYY-MM-DD) in <151>
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
E 341	'Xaa' position not defined SEQID (1) POS (12)
E 341	'Xaa' position not defined SEQID (1) POS (13)
E 341	'Xaa' position not defined SEQID (1) POS (14)
E 341	'Xaa' position not defined SEQID (1) POS (15)
E 341	'Xaa' position not defined SEQID (1) POS (16)
E 341	'Xaa' position not defined SEQID (1) POS (17)
E 341	'Xaa' position not defined SEQID (1) POS (18)
E 341	'Xaa' position not defined SEQID (1) POS (19)
E 341	'Xaa' position not defined SEQID (1) POS (20)
E 341	'Xaa' position not defined SEQID (1) POS (21)
E 341	'Xaa' position not defined SEQID (1) POS (22)
E 341	'Xaa' position not defined SEQID (1) POS (23)
E 341	'Xaa' position not defined SEQID (1) POS (24)

Input Set:

Output Set:

Started: 2007-07-19 18:29:54.051  
Finished: 2007-07-19 18:31:26.799  
Elapsed: 0 hr(s) 1 min(s) 32 sec(s) 748 ms  
Total Warnings: 284  
Total Errors: 366  
No. of SeqIDs Defined: 292  
Actual SeqID Count: 293

Error code	Error Description
E 341	'Xaa' position not defined SEQID (1) POS (25)
E 341	'Xaa' position not defined SEQID (1) POS (26)
E 341	'Xaa' position not defined SEQID (1) POS (27)
E 341	'Xaa' position not defined SEQID (1) POS (28)
E 341	'Xaa' position not defined SEQID (1) POS (29)
E 341	'Xaa' position not defined SEQID (1) POS (30)
E 257	Invalid sequence data feature in <221> in SEQ ID (2)
E 257	Invalid sequence data feature in <221> in SEQ ID (3)
E 257	Invalid sequence data feature in <221> in SEQ ID (4)
E 257	Invalid sequence data feature in <221> in SEQ ID (5)
E 257	Invalid sequence data feature in <221> in SEQ ID (6)
E 257	Invalid sequence data feature in <221> in SEQ ID (7)
E 257	Invalid sequence data feature in <221> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)

Input Set:

Output Set:

Started: 2007-07-19 18:29:54.051  
Finished: 2007-07-19 18:31:26.799  
Elapsed: 0 hr(s) 1 min(s) 32 sec(s) 748 ms  
Total Warnings: 284  
Total Errors: 366  
No. of SeqIDs Defined: 292  
Actual SeqID Count: 293

Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
E 342	'n' position not defined found at POS: 20 SEQID(21)
E 342	'n' position not defined found at POS: 22 SEQID(21)
E 342	'n' position not defined found at POS: 26 SEQID(21)
E 342	'n' position not defined found at POS: 28 SEQID(21)
E 342	'n' position not defined found at POS: 31 SEQID(21)
E 342	'n' position not defined found at POS: 34 SEQID(21)
E 342	'n' position not defined found at POS: 38 SEQID(21)
E 342	'n' position not defined found at POS: 41 SEQID(21)
E 342	'n' position not defined found at POS: 44 SEQID(21)
E 342	'n' position not defined found at POS: 47 SEQID(21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
E 342	'n' position not defined found at POS: 19 SEQID(22)
E 342	'n' position not defined found at POS: 22 SEQID(22)
E 342	'n' position not defined found at POS: 26 SEQID(22)
E 342	'n' position not defined found at POS: 28 SEQID(22)
E 342	'n' position not defined found at POS: 31 SEQID(22)
E 342	'n' position not defined found at POS: 35 SEQID(22)
E 342	'n' position not defined found at POS: 38 SEQID(22)

Input Set:

Output Set:

Started: 2007-07-19 18:29:54.051  
Finished: 2007-07-19 18:31:26.799  
Elapsed: 0 hr(s) 1 min(s) 32 sec(s) 748 ms  
Total Warnings: 284  
Total Errors: 366  
No. of SeqIDs Defined: 292  
Actual SeqID Count: 293

Error code	Error Description
E 342	'n' position not defined found at POS: 41 SEQID(22)
E 342	'n' position not defined found at POS: 44 SEQID(22)
E 342	'n' position not defined found at POS: 46 SEQID(22) This error has occurred more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27) This error has occurred more than 20 times, will not be displayed
E 257	Invalid sequence data feature in <221> in SEQ ID (36)
E 257	Invalid sequence data feature in <221> in SEQ ID (56)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (293)
E 252	Calc# of Seq. differs from actual; 292 seqIds defined; count=293



# Sequence Listing

<110> Sidhu, Sachdev S.  
Weiss, Gregory A.  
Wells, James A.

<120> TRANSFORMATION EFFICIENCY IN PHAGE DISPLAY THROUGH MODIFICATION OF A  
COAT PROTEIN

<130> 11669.141USWO

<140> 09380447

<141> 1999-09-01

<150> US 09/380,447

<151> 1999 09 01

<150> US 60/134,870

<151> 1999 05 19

<150> US 60/133,296

<151> 1999 05 10

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<151> 1998 10 08

<150> US 60/094,291

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<150> PCT/USUS99/16596

<151> 1999 07 22

<160> 292

<210> 1

<211> 50

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic coat protein

<220>

<221> unsure

<222> 12 30

<223> unknown amino acid

<400> 1

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Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				20					25					30

Glu	Thr	Ala	Ser	Ala	Gln	Leu	Ser	Asn	Phe	Ala	Ala	Lys	Ala	Pro
				35					40					45

Asp Asp Gly Glu Ala  
50

<210> 2

<211> 50

<212> PRT

<213> M13 phage

<220>

<221> M13 phage

<222> 1 50

<223> coat protein VIII

<400> 2

Ala Glu Gly Asp Asp Pro Ala Lys Ala Ala Phe Asn Ser Leu Gln  
1 5 10 15

Ala Ser Ala Thr Glu Tyr Ile Gly Tyr Ala Trp Ala Met Val Val  
20 25 30

Val Ile Val Gly Ala Thr Ile Gly Ile Lys Leu Phe Lys Lys Phe  
35 40 45

Thr Ser Lys Ala Ser  
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<210> 3

<211> 50

<212> PRT

<213> f1 phage

<220>

<221> f1 phage

<222> 1 50

<223> coat protein VIII

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Ala Glu Gly Asp Asp Pro Ala Lys Ala Ala Phe Asp Ser Leu Gln  
1 5 10 15

Ala Ser Ala Thr Glu Tyr Ile Gly Tyr Ala Trp Ala Met Val Val  
20 25 30

Val Ile Val Gly Ala Thr Ile Gly Ile Lys Leu Phe Lys Lys Phe  
35 40 45

Thr Ser Lys Ala Ser  
50

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<211> 50

<212> PRT

<213> fd phage

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<222> 1 50

<223> coat protein VIII

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Ala Glu Gly Asp Asp Pro Ala Lys Ala Ala Phe Asp Ser Leu Gln  
1 5 10 15

Ala Ser Ala Thr Glu Tyr Ile Gly Tyr Ala Trp Ala Met Val Val  
20 25 30

Val Ile Val Gly Ala Thr Ile Gly Ile Lys Leu Phe Lys Lys Phe  
35 40 45

Thr Ser Lys Ala Ser  
50

<210> 5

<211> 50

<212> PRT

<213> Zj 2 phage

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<221> Zj 2 phage

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<223> coat protein VIII

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Ala Glu Gly Asp Asp Pro Ala Lys Ala Ala Phe Asp Ser Leu Gln  
1 5 10 15

Ala Ser Ala Thr Glu Tyr Ile Gly Tyr Ala Trp Ala Met Val Val  
20 25 30

Val Ile Val Gly Ala Thr Ile Gly Ile Lys Leu Phe Lys Lys Phe  
35 40 45

Ala Ser Lys Ala Ser  
50

<210> 6

<211> 50

<212> PRT

<213> Ifl phage

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<222> 1 50

<223> coat protein VIII

<400> 6

Asp Asp Ala Thr Ser Gln Ala Lys Ala Ala Phe Asp Ser Leu Thr  
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Ala Gln Ala Thr Glu Met Ser Gly Tyr Ala Trp Ala Leu Val Val  
20 25 30

Leu Val Val Gly Ala Thr Val Gly Ile Lys Leu Phe Lys Lys Phe  
35 40 45

Val Ser Arg Ala Ser  
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<211> 50  
<212> PRT  
<213> I2 2 phage

<220>  
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Ser Thr Ala Thr Ser Tyr Ala Thr Glu Ala Met Asn Ser Leu Lys  
1 5 10 15

Thr Gln Ala Thr Asp Leu Ile Asp Gln Thr Trp Pro Val Val Thr  
20 25 30

Ser Val Ala Val Ala Gly Leu Ala Ile Arg Leu Phe Lys Lys Phe  
35 40 45

Ser Ser Lys Ala Val  
50

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<211> 50  
<212> PRT  
<213> Ike phage

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<222> 1 50  
<223> coat protein VIII

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Asn Ala Ala Thr Asn Tyr Ala Thr Glu Ala Met Asp Ser Leu Lys  
1 5 10 15

Thr Gln Ala Ile Asp Leu Ile Ser Gln Thr Trp Pro Val Val Thr  
20 25 30

Thr Val Val Val Ala Gly Leu Val Ile Arg Leu Phe Lys Lys Phe  
35 40 45

Ser Ser Lys Ala Val  
50

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<223> oligonucleotide primer

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<211> 35

<212> DNA

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<211> 56

<212> DNA

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<223> oligonucleotide primer

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atcgtc 56

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<211> 34

<212> DNA

<213> Artificial sequence

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aggtgtcgtg g 61

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<210> 17  
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<223> mutagenic oligonucleotide

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<210> 18  
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<213> Artificial sequence

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<212> DNA

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cgctgggcga tggttgtttg atgagtcggc gcaactatcg gt 42

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<210> 21

<211> 66

<212> DNA

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<220>

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<223> unknown base

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taactccctg caagcc 66

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<211> 66

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<223> mutagenic oligonucleotide

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<223> unknown base

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tatcggttat gcgtgg 66

<210> 23  
 <211> 70  
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 tcattgtcgg cgcaactatc 70  
  
 <210> 24  
 <211> 66  
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 <222> 19, 22, 25, 28, 31, 34, 37 38, 40 41, 43 44  
 <223> unknown base  
  
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 gtttaagaaa ttcacc 66  
  
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<213> Artificial sequence

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<223> mutagenic oligonucleotide

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<210> 27

<211> 36

<212> DNA

<213> Artificial sequence

<220>

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<223> mutagenic oligonucleotide

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<210> 29

<211> 75

<212> DNA

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<220>

<223> mutagenic oligonucleotide

<400> 29

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attcctggct atcgtgcagt gccgc 75

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<211> 57

<212> DNA

<213> Artificial sequence

<220>

<223> mutagenic oligonucleotide

<400> 30

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ccgctct 57

<210> 31

<211> 42

<212> DNA

<213> Artificial sequence

<220>

<223> mutagenic oligonucleotide

<400> 31

ggtaggagat ccgggagctg atgagccgag ggtgacgac cc 42

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<211> 46

<212> DNA

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<223> mutagenic oligonucleotide

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<210> 33

<211> 50

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<220>

<223> P12 1 variant

<400> 33

Met	Ser	Lys	Ser	Thr	Phe	Lys	Lys	Phe	Leu	Lys	Val	Phe	Val	Phe
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Ser	Val	Asp	Val	Asp	Asn	Asn	Trp	Ile	Trp	Ala	Val	Gly	Ile	Ile
				20				25					30	

Tyr	Met	Leu	Leu	Val	Glu	Ala	Ser	Pro	Trp	Ala	Ala	Lys	Ala	Pro
				35				40					45	

Asp	Asp	Gly	Glu	Ala
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cvvcvvcvvc vvcvvcvvcg gcggtgccga gggtagacat ccc 93

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ggtgacgata cc 112

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cattgtcggc gcaact 66

<210> 42  
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tatgaggctc ttgaggccat tgctactaac tat 33

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tatcggttat gcgtgg 66

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cggttatgcg 60

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